

# St. Bartholomew's Hospital



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### St. Bartholomew's Hospital Journal,

AUGUST 14th, 1897.

"Æquam memento rebus in arduis  
Servare mentem."—Horace, Book ii, Ode iii.

### On the Operative Treatment of Fracture of the Patella.

*A Clinical Lecture delivered June 30th, 1897,*

*By H. T. BUTLIN, F.R.C.S., D.C.L.*

**G**ENTLEMEN,—To show that the treatment of fracture of the patella is worthy of a clinical lecture, it may suffice to state that our hospital statistics of the years 1891 to 1895 inclusive tell that 150 cases of this accident were admitted into the hospital during the five years, making an average of thirty cases each year; and the large majority of the cases occurred in active men, in the full vigour of health and strength.

As Demonstrator of Surgery, years ago, I held and taught

that recent fracture of the patella should be treated by the expectant method, and I am told that this is still the routine teaching of the practical surgery department, and for much the same reasons as I used to give: first, because operation is dangerous; second, because the "expectant method" yields perfectly satisfactory results; therefore operation is both unnecessary and unjustifiable.

To-day I am going to take the opposite side, and try and show that there are circumstances in which operation is not only justifiable, but very desirable.

The "expectant method" usually adopted in this hospital is briefly as follows:—The limb is placed on a back-splint or patella apparatus, means being taken to bring the fragments into close apposition. Sometimes the joint is tapped and the fluid drawn off. At the end of six weeks the limb is put up in plaster of Paris for another six weeks. The patient is then allowed to go about, wearing some apparatus to restrict the amount of movement, and this is ordered to be worn for three, six, or even nine months. Hence many months elapse before he is able to pursue active bodily work. And what is then the result? Generally speaking, a limb less sound than it was before the accident. The bond of union between the fragments is prone to give way. The same patella is often broken a second time. And the other patella is not infrequently broken owing to the weakness of the union of the patella which was first broken. (Of the patients shown to-day, one has broken the same patella three times, and another has broken both patellæ.)

A curious proof of the failure of the "expectant method" is to be found in our hospital statistics, which show that during the five years already mentioned there were twenty-nine admissions of old fractures of the patella. And in several of these the union was so defective that an operation was practised to bring the broken fragments in apposition.

As regards the dangers of the operation, it is interesting to study a paper by Mr. Turner, of St. George's Hospital, written in the year 1883 (*Clin. Soc. Trans.*, 1884, p. 37). Mr. Turner collected together all the cases, whether published or not, in which the patella had up to that time been

wired for old and recent fracture. The results were not very encouraging. There were fifty cases in all. Two of the patients died of septic poisoning; the joint suppurated in thirteen cases; many of the patients were left with a stiff joint. When it is further known that the treatment was tedious, that the wires were usually removed by a second operation, that a stiff apparatus was kept on for three or more months, and that it was then often necessary to break down the adhesions, I can well understand that neither surgeons nor patients were much in favour of an operation.

It must further be borne in mind that all the fifty operations collected by Mr. Turner were performed after the introduction of antiseptic surgery, and were supposed to have been performed with greater or less antiseptic care. It may, therefore, easily be understood that the publication of this paper had a decided effect in discouraging surgeons from performing the operation of wiring the patella.

Its influence has lasted so long that very few text-books on surgery or on fractures venture to recommend that fracture of the patella should be treated by operation.

I believe I performed the first operation which was performed for a recent fracture of the patella in this hospital in the year 1893, only four years ago, and I believe the only "open" operations for recent fracture during the year 1894 were mine. But since then some of my colleagues have performed the operation, and I am glad to be able to say that not one of our "open" operations, whether for old or recent fracture, has suppurated, and I believe the results have been uniformly good. Since I have been surgeon to the hospital I have opened the knee-joint many times for the removal of loose bodies, for the removal of the internal semilunar cartilage, and for displacement of the tibial tubercle. Not a single case has given me any anxiety, and not one of the wounds has suppurated even superficially, and I am gradually coming to the belief that the opening of large joints is less likely to be followed by occasional suppuration than many other operations whose reputation is much better. I am sure that the operations for the radical cure of hernia and for amputation of the breast and removal of the contents of the axilla are much more likely to detect and resent a flaw in detail.

The manner of performing the open operation may be briefly described as follows:—The integument is very carefully prepared on the night preceding. A longitudinal or (better still) semicircular incision is made, and the bone is thoroughly exposed. Blood-clot and other materials which lie between the fragments are removed, and the interior of the joint is cleansed. The surfaces of the broken patella are scraped with a Volkmann's spoon. The upper fragment is then bored with an ordinary borer from above downwards and from before backwards, in such a manner that

the borer passes from the upper margin through the bone, and emerges just in front of the cartilage. The lower fragment is bored from the broken surface of the bone, in front of the articular cartilage, out through the lower margin of the bone or through the ligamentum patellæ. Two pieces of stout silver wire are passed through the fragments. The joint is washed out with an antiseptic solution, followed by boracic lotion or sterilised water. The fragments are brought closely together, and the ends of the wires are twisted so as to hold the fragments as close as possible. The cut twisted ends are bent down, so that they look towards the bone, or are even pressed into the surface of the bone. A drainage-tube is inserted, and if there is much oozing a second drainage-tube is inserted at the other angle of the wound. The flap is stitched in place, the dressings are applied, and beneath them a back-splint and footpiece, and the limb is slung.

The drainage is generally removed on the third or fourth day. The wound is dressed again on the tenth day, and the stitches are removed. If the drainage-wounds are closed, the splint is taken off. A week later the patient is allowed to move the limb in bed, but in an elastic bandage. He is usually discharged at the end of a month or five weeks from the operation, wearing an elastic bandage, and walking slowly about. If the case is treated in this manner there is no question of removing wires by a second operation, and no need to break down adhesions, for the patient has begun to move the joint slightly within a fortnight of the operation, and is up and about between three and four weeks after it.

The advantages of such wiring are that, when it is successful, the limb is as strong and useful as it was before; the patient can climb and carry weights, and run and jump. And, second, the duration of the treatment is greatly shortened. A man can walk about, with caution, and perform light duties six weeks after the operation, and he need wear no other support than an elastic bandage. But I think, if his work is arduous, he ought not to undertake it for three months after the patella has been wired. He is certainly fit for his work in half the time needed under the expectant treatment; and I believe that I am much understating the advantage which he gains in this respect. Look at it, if you will, from an economic point of view—two to three months saved to a working man. Measure the value of his time at a pound or thirty shillings a week, and that amounts to ten or fifteen pounds for ten weeks saved.

I do not go so far as to recommend or practise operation in every case of fracture of the patella. But, in transverse fractures, in young and active subjects, or even in men under sixty years of age, who are in sound health, I wire the patella whenever the patient will permit it. In order that there may be no uncertainty as to the relative risks and results, I generally take the opportunity of going over

the case with my class at the bedside of the patient, who thus hears the discussion and accepts the operation with as full a knowledge as a layman can have of the risk he runs. I do not think that wiring is so necessary in women, but there is no objection to it in good subjects, especially in those who are young and work hard.

The operation may be performed at once or within a week or two of the accident; it seems to matter little whether it is performed at once or is deferred for a while. The last patient on whom I operated was a potman, and I left him for ten days to see whether he had been in the habit of drinking much more than was good for him.

I need scarcely say that whether the operation is performed on aseptic or on antiseptic principles every detail must be scrupulously attended to. Surgeons who are doubtful of the course of their operation cases should not undertake these operations.

I am also strongly of opinion that it is desirable to drain the joint during the first three or four days after it has been opened. In cases in which loose bodies are removed it is not our custom to drain. But where the interior of the joint is much more roughly handled I am sure it is a wise precaution. This was decidedly impressed on me about three years ago in the case of a young officer of the army, from whose knee-joint I cut out a loose, partly detached semilunar cartilage. Although the limb was kept on a back-splint and slung, and the pulse and general condition were satisfactory, the temperature steadily rose and the knee became more and more full of fluid, until he suffered so much pain that I was obliged to introduce a tube under an anæsthetic and drain away the synovial fluid for two or three days. I do not know that the progress of the case to perfect recovery was interrupted, but the patient suffered a good deal of pain, while I was alarmed lest the joint should be suppurating.

The description of the method of operating shows that the wires should not lie in the interior of the joint, and this I regard as extremely important. Should stitch suppuration spread from the external wound to the wires, it might extend into the joint along the line of the wire. And if for any reason it should be necessary to remove the wires, it would be much better and safer that they should be at that time shut out from the interior of the joint.

I have not dealt in this lecture with other methods of uniting the fragments of the patella, for I have had no experience of them. Personally I prefer to open the joint and see clearly what I am doing. But subcutaneous methods have been invented, and one or two of them are very ingenious. I believe the subcutaneous all-round method has been employed on several occasions in the hospital, but the results have not been so good as those which have followed the open method.

NOTE.—Four patients were exhibited. In the first the

operation had only been performed a few days. He was brought across from the ward to show the condition of the other patella, which had been long previously broken. The fragments were separated to the extent of about 3 or 4 inches. The limb was so weak that he readily accepted an operation for the recent fracture. (He rapidly recovered and has since left the hospital, walking about in an elastic bandage between four and five weeks after the operation.)

In the second case the patella had been united about five or six weeks previously. It had been three times broken transversely at different levels, the last time a few days before the operation. Three of the fragments were united by wires, but the distance between the third and fourth was so great that I was afraid to attempt to bring them together lest the other fragments should be torn apart. This patient was no longer in the hospital.

The third and the fourth patients had been operated on long previously. The union was perfect, and the men were able to do all they had done before the accident. One of them had returned to his work, which was very arduous, three months after the wiring; the other not until six months had elapsed. I could not discover any reason why he had remained so long idle, except that he seemed to think that it would be safer to take a long holiday. Although his work was heavy, he seems to have been quite fit for it three months before he took it up again.

### Contributions towards a History of the Surgical Teaching at St. Bartholomew's Hospital during the Nineteenth Century.

By D'ARCY POWER, F.R.C.S., F.S.A., Demonstrator of Practical and Operative Surgery.

#### I. HARMONY.



MUCH may often be learnt from a retrospect. It tells us not only what we have been, but it teaches us where we are and by what means we may improve. The end of a century, too, is no inconvenient time to take stock of our methods, and to see what progress has been made. My position as a teacher of surgery in the medical school renders it incumbent upon me to know the best plans of teaching; my pleasure leads me to reflect upon the methods formerly adopted in the school; its interests lead me to find out why they have failed or by what means they have become modified.

It is impossible to fix a date when surgery became a progressive science in England. The more intimate we become with early surgical literature, the more we realise that some members of our profession were always striving to raise it above the level of their time. Men like Read

and Halle and Clowes in the reign of Elizabeth did infinite service by steadily working to make surgery a profession rather than a handicraft. Wiseman introduced a new element into it—that of gentility,—and from his time surgery was no longer a servile profession. The mantle of Wiseman fell upon Percivall Pott, from Pott it passed to Hunter, from Hunter to Abernethy and Astley Cooper, and from them to Lawrence—perhaps the most highly cultivated surgeon the world had seen. By such steps it has been possible for the Sovereign to bestow a peerage upon Lord Lister, for it is only by slow gradations that we have become fitted to obtain social distinction.

The systematic teaching of surgery at St. Bartholomew's Hospital began in 1744, when Percivall Pott was elected assistant surgeon "in room of Joseph Webb, appointed surgeon and guide to Kingsland Hospital." Pott was then living in Watling Street, and he used to invite pupils to his house to teach them the more theoretical parts of surgery. The course was at first private, but it soon acquired so great a reputation that in 1765, the year in which he succeeded Nourse as senior surgeon, it was delivered publicly to all students at St. Bartholomew's Hospital. "These lectures," says his biographer and eulogist, "at first given with hesitation and reserve, afterwards became the most celebrated in London, and served to spread his views and methods of treatment throughout Europe."

Percivall Pott resigned the office of surgeon to St. Bartholomew's Hospital July 12th, 1787, after having served the charity, as he used to say, man and boy for half a century. On July 15th, 1787, Abernethy was elected after a contest to succeed to the vacant office of assistant surgeon. Abernethy was a born teacher, but like many of his successors in the hospital his natural ability was still further sharpened by the necessity of maintaining himself during the long and unremunerative interval which almost necessarily occurs in the life of every hospital surgeon who aspires to the highest position in his profession. Surgical teaching in its modern sense began at St. Bartholomew's Hospital at the advent of Abernethy. His position differed greatly from that occupied by Pott. When Pott began to teach he had no models to follow. The formal lectures at the Barber-Surgeons' Company and at the College of Physicians still existed, but they were almost effete. Abernethy, on the other hand, could not only follow the lines laid down by Pott, but he could see the results of really good teaching at the Hunterian or Great Windmill Street School of Medicine, where William Hunter, assisted by the best teachers in London, had for many years given a very complete course of medical education. It was not, therefore, so hard for Abernethy to make a beginning as it had been for Pott, yet it was hard enough. The rank and file of the profession at this time began to desire education. They were so thoroughly dissatisfied with the management of the profession as it was ordered by the

Corporation of Surgeons that when an opportunity occurred they took advantage of it to overthrow the Surgeons' Company. Indeed, so complete was the overthrow, and so determined was the opposition to the establishment of any corporate body upon the same lines, that it was only with the greatest difficulty that the present College of Surgeons was brought into existence.

Abernethy (1764—1831), like Pott, lectured outside the hospital, for as yet there was no medical school. His lectures were given in Bartholomew Close, and at first they were devoted to anatomy. In a short time physiology, pathology, and surgery were added to his syllabus, and in 1791 he ventured to introduce into his course some prefatory remarks upon physiological chemistry. His lectures lasted for many years, and they soon became one of the surgical attractions of the metropolis, frequented alike by English and foreign students. Their value was early recognised by the governors of the hospital, who gave orders that a lecture theatre should be built within its walls, and in October, 1791, the lectures were given in the new theatre, and the medical school came into existence.

We have no contemporary record of Abernethy's lectures for some years after he had commenced to deliver them, and it is not until (Sir) Robert Christison became a student at St. Bartholomew's Hospital that we are able to obtain a graphic record of his manners and habits from an authentic source. Sir Robert in his autobiography, written late in life, gives an interesting account of the state of surgical teaching in 1820 at St. Bartholomew's Hospital.

Starting from Leith in May, 1820, Christison reached London after a journey of eight days and nine nights at sea, and was welcomed by Cullen, who had engaged lodgings for him in Well Yard, Little Britain, then a students' quarter. Cullen had already been six months in London, and was acting as prosecutor to Abernethy, so that Christison was at once introduced to the great teacher. He describes him as a very little man, but in figure and countenance uncommonly handsome. "He had not strength enough to become a great operator, and the diagnosis and constitutional treatment of surgical diseases were his favourite field of practice, and in these branches of consulting practice he was at this time *facile princeps* among London surgeons. He was an early cultivator of what is now aptly called 'conservative surgery,' but I do not remember that term as in use at the period in question, and the surgical tendency certainly was to fly too precipitately to the knife and saw. That never was Abernethy's fault. He was a good operator when driven to operate, but he disliked it. Cullen, who was his anatomical assistant, told me he had seen him in his retiring room, after a severe operation, with the big tears in his eyes, lamenting the possible failure of what he had just been compelled to do by dire necessity and surgical rule."

It was a rule of the hospital at this time that surgical



students did not visit the medical wards unless duly entered as physicians' pupils also. But by use and wont the physicians' pupils were allowed to go freely into the surgical wards, and Christison often took advantage of the privilege. Thus he soon became intimate with the two house surgeons, and he notes it as a curious fact that although there were resident surgical assistants there were no similar medical officers. At this time, too, there were but three students in the medical wards, whilst the surgical pupils amounted to several hundreds.

Abernethy's lectures were given in an evening, like all the surgical lectures in London, whilst the anatomical lectures were given earlier in the day. His position was always easy and natural, sometimes a little too homely. In the anatomical lecture he always stood, and either leant against the wall, with his hands folded before him, or resting one hand on the table with the other perhaps in his pocket. In his surgical lecture he always sat, and very generally with one leg resting on the other. The expression of his countenance was in the highest degree clear, penetrative, and intellectual, and his long but not neglected powdered hair, which covered both ears, gave altogether a philosophic calmness to his whole expression that was particularly pleasing. Then came a sort of smile which mantled over the whole face, and lighted it up with something which we cannot define, but which seemed a compound of mirth, archness, and benevolence. He used neither manuscript nor notes in his lectures. They were delivered spontaneously, and Mr. Macilwain says of him that he was particularly happy in a kind of cosiness or friendliness of manner, which seemed to identify him with his audience; as if we were all about to investigate something interesting together, and not as if we were going to be "lectured at" at all. He spoke as if addressing each individual, and his voice seldom rose above what we may term the conversational either in pitch or tone. It was in general pleasing in quality, and enlivened by a sort of archness of expression. His loudest tone was never oppressive to those nearest to him, his most subdued was audible everywhere. The range of pitch was very limited; the expression of the eye and a slight modulation being the media by which he infused through the lecture an agreeable variety, or gave to particular sentiments the requisite expression. There was nothing like declamation. He had no offensive tricks, for he had acquired the most difficult of all arts for a lecturer to acquire, the appearance of perfect ease without the slightest presumption. The matter of his lectures was as good as their manner. Clothed in the simplest language, his lectures were a sort of running metaphor, which aided by a certain quaintness of manner made common things go very amusingly. Muscles which pursued the same course to a certain point were said to travel together sociably, and then to "part company." Blood-vessels and nerves had certain habits in their mode of distribution contrasted in this way; arteries

were said to creep along the sides or between muscles. Nerves, on the contrary, were represented as penetrating their substance "without ceremony." Then he had always a ready sympathy with his audience. If a thing was difficult, he would anticipate the feelings of the audience. His lectures, too, were illustrated with a variety of anecdotes drawn from every source, all calculated to awaken the interest of the class in the subject under discussion, but all equally calculated to fix some important point in the memory of the audience. Mr. Macilwain thus sums up his lectures:—"His manner was so good that it is difficult to convey any idea of it. It was easy without being negligent, cheerful without being excited, humorous, often witty without being vulgar, expeditious without being in a bustle; and he usually took care that you should learn the thing before he gave a name to it, and understand it before he expatiated on the beauty or perfection of its adaptation to the end it seemed designed to serve."

Like all great men, Abernethy trained his subordinates to carry on his traditions, and enable his work to progress in spite of the limit which time puts to the endeavours of an individual. Chief amongst his subordinates was Edward Stanley (1793-1862), a nephew of Sir William Blizard, Abernethy's old master in anatomy, at the London Hospital. Stanley had been apprenticed to Thomas Ramsden, one of the surgeons at St. Bartholomew's Hospital; but when Ramsden died in 1810, Stanley was turned over to Abernethy to serve the remainder of his term. It soon appeared that he had a natural genius for the study of morbid anatomy. He was indefatigable in attending the deadhouse at a time when no physician, and hardly any of the surgeons, were known to set foot within its walls. Abernethy approved his zeal, and set him to work to enlarge the museum of specimens with which he was accustomed to illustrate various points in his anatomical and surgical lectures. Hitherto the Museum had been the private property of the teachers, first of Pott, then of Abernethy, and finally of Abernethy and Stanley jointly, but in 1829 Abernethy and Stanley offered their collection to the governors of the hospital for the use of the medical school, and engaged themselves not to make any private collection, but to add future specimens to the nucleus thus provided. The offer was accepted, a proper catalogue was ordered to be prepared and printed, and the museum began to assume the important position it has ever since held in the surgical teaching of the hospital.

Abernethy was at first his own demonstrator of anatomy, but Stanley soon came to his help, and relieved him of the drudgery of this office, and he in turn gave place to Skey, and then to Wormald. During the later years of Abernethy's life Stanley acted as joint lecturer, and when Abernethy ceased to lecture in 1828, Stanley assumed the whole duty of the office.

It would be invidious, and not altogether profitable, to

compare Abernethy with his great contemporary, Sir Astley Cooper, or with his remarkable pupil, Sir William Lawrence. Yet to the school of St. Bartholomew's Hospital Abernethy bore much the same relation as Astley Cooper bore to that of Guy's Hospital. He made it, brought it to maturity, and left upon it the stamp of his own individuality which has continued to the present day. Abernethy had no real love for anatomy. He was essentially a physiologist, and had he lived at the present day he would in all probability have been a pathologist. Like his successors, Paget and Savory, he dealt rather with the principles of surgery than with operative details. His lectures, like theirs, were models for the instruction of students; for out of generalities an intelligent pupil could afterwards formulate for himself the rule of practice in individual cases. The accidents of his position were unfavorable to the highest development of his intellectual powers; for if his period of bondage in the out-patient room could have been shortened, there is no doubt that his mental energy would have found an outlet in producing something of more lasting value than anything to which it gave rise. Surely John Hunter was wiser in his generation, when at forty he refused any longer to teach anatomy, and immediately began to publish those observations which have rendered his name immortal.

### Eucaine as a Local Anæsthetic when used Hypodermically.

By F. C. WALLIS, M.B., F.R.C.S.,

Assistant Surgeon, Charing Cross Hospital; Surgeon to the Metropolitan Hospital.

**I**N the *British Medical Journal* of January 16th, 1897, there is an interesting article on the use of eucaine as a local anæsthetic in the surgery of the throat, nose, and ear, by Dr. Horne and Mr. Yearsley, but there is no mention of its effect when used hypodermically, except in two cases by Dr. A. L. Fuller. I have used eucaine in this latter way for some months past, very frequently at St. Mark's, and also to a less extent at Charing Cross Hospital, and I propose recording here the general results of my experience of this drug. I may start by saying they are most satisfactory. The following points seem to be those which are of practical importance.

1. The strength of the solution.
2. The preparation of the solution and duration of its efficacy.
3. The amount injected.
4. The method of injection.
5. The extent of operation possible.
6. The after effects.

1. *The strength of the solution.*—I have used only one strength since I first began to use the drug, and that is a solution of 4 per cent. I have never seen any signs of toxic effects even when a considerable amount has been used—except in one doubtful case which I shall mention later. This percentage is quite strong enough to produce absolute local anæsthesia for any small operation.

2. *The preparation of the solution and duration of its efficacy.*—Eucaine is soluble to a limited extent and with great difficulty in cold water. It is quite soluble in hot or boiling water, and, as has been pointed out in the paper alluded to above, the drug can be sterilised by boiling without any alteration in its composition or effect. The solution thus prepared will be effective for a week, but after the third day it is as well to prepare a fresh solution, as it has not such a decided anæsthetic effect after this lapse of time.

3. *The amount injected.*—This will, of course, depend upon the extent of the operation. I have, in a large ischio-rectal abscess, injected as much as  $3\frac{1}{2}$  to 4 drachms subcutaneously without any ill effects at all. The average amount required for a small operation is from 1 to  $1\frac{1}{2}$  drachms of the 4 per cent. solution. But one of the great boons this drug possesses is that the operator need not be at all nervous about using sufficient, and if the desired anæsthetic effect is not produced by 1 drachm, the second or third can be used with every confidence as to the safety of it.

4. *The method of injection.*—The syringe should be one of those which has the needle to screw on the nozzle, to which a washer is attached; such are supplied by Parke, Davies, and Co., and others. This is a matter of importance, because if the needle is simply fixed on a smooth nozzle, it will be found in endermic injections that the fluid comes out where there is least resistance, namely, between the needle and the nozzle, especially when the tissues are inflamed, brawny, or cicatricial. The syringe and needle should be of such a kind that all parts of it can be thoroughly cleaned, and either sterilised or rendered aseptic by other methods. At St. Mark's the needles and syringe are placed in a 5 per cent. solution of carbolic acid, about an hour before the out-patient work is begun, and kept there when not in use the whole afternoon. The necessity for this will be obvious. The method which I pursue in the injection of the fluid is as follows:

The patient is shown the needle and told that he will feel the first prick of it and nothing else (this is nearly, but not quite always true). If the patient is not aware of what is happening, and feels the prick of the needle, he is almost sure to jump away, and the process has to be repeated.

The first injection of about 10 minims is made *into* the epidermis; after three or four seconds the needle is pushed onwards into the subcutaneous tissue, and in the line of the

proposed incision. If more than one syringe-ful is required the needle is withdrawn, filled and thrust in again about half an inch in front of the last puncture, thus ensuring an anæsthetic area for the puncture, and in nearly every case this is painless after the first prick. When sufficient has been injected for the length of the incision, the knife may be used *immediately*. In the greater number of cases the time occupied between the first prick of the needle and the incision is not more than *one minute*; there is no doubt about this, and it is quite remarkable how complete and rapid the anæsthesia is.

When eucaine is injected endermically or into tense or inflamed tissues, the first injection causes pain beyond the prick of the needle for a second or two. This is due to the *distension of the tissues by the fluid*. In these cases the first injection should not consist of more than 5 or 6 minims.

5. *The extent of operation possible.*—I do not think it possible to say yet how much one may do in certain cases. If the operation is of some length, it is always advisable to have the patient prepared for a general anæsthetic, and to have an anæsthetist present, as patients sometimes suddenly lose all nerve control, and then it is hopeless trying to do anything with eucaine.

Perhaps the best plan will be to enumerate the cases in which I have used the drug.

#### *Removal of tumours:*

Lipoma ... ..	2
Dermoids ... ..	2
Sero-cystic of breast ... ..	1
Enlarged bursa patellæ ... ..	1
Sebaceous cysts of face ... ..	2
Sarcoma of ulnar nerve ... ..	1

#### *Rectal operations:*

Ischio-rectal abscesses ... ..	24
Fissures of anus ... ..	13
Perinæal piles ... ..	7
Thrombotic external piles ... ..	

(I have used it for a large number of these, I do not know how many.)

#### *Abdominal operations:*

Umbilical hernia (with suppurating sac) ... ..	1
Closure of colotomy wound ... ..	1

I have frequently used it in the out-patient room for abscesses, and have found it most useful, both in hospital and private work, for removing the redundant skin which is sometimes left after operations for hæmorrhoids.

The last two operations in the list are the most interesting. The umbilical hernia took about thirty-five minutes. The eucaine was first injected into a sinus, and after that had taken effect it was injected into various places on the skin. Two large flaps of skin were removed; the omentum

was then scraped and ligatured, and the skin brought together by silkworm-gut sutures. The only pain felt was when my assistant stuck a pin into the patient, when he—the patient—volunteered the statement that that was the only pain he had felt.

The closure of the colotomy wound took fifty-nine minutes. The effects of the first lot of eucaine lasted fifty-four minutes, and the last amount was used for putting in the sutures for the skin.

The patient was quite quiet after the first ten minutes, before which he would persist in laughing, which made operating somewhat difficult; but after he had been spoken to about this he was perfectly quiet, with gentle, regular abdominal movement, and there was no after vomiting which so often takes place with general anæsthesia.

In this last case I used from first to last quite six drachms of the 4 per cent. solution without any kind of toxic effects whatever.

This patient was prepared for general anæsthesia in accordance with the rule laid down above. In this case, and in the case of the umbilical hernia, the comfortable condition of the patients during the operation was remarkable, and the effect of the drug in every way was most satisfactory.

6. *The after effects.*—I have not any to record. There was one doubtful case—a rectal one. The patient was a young man with an ischio-rectal abscess, which had been allowed to burst. I injected between twenty and thirty minims of the 4 per cent. solution and enlarged the opening. When he got up from the table the patient became very white, and looked faint, perspiring profusely; I thought it might be due to the drug, except that such a small amount had been used. On inquiry, I found that he was liable to turn faint in this way, and had often done so. This is the only case.

The results recorded above prove, one may fairly say, that eucaine used hypodermically as a local anæsthetic is most effective, and without toxic effects even when used in comparatively large quantities. The rapidity with which it produces anæsthesia is also a point in its favour.

With regard to the duration of the effect, I do not think that the case of the closure of the colotomy wound quoted above should be taken as an example. The greater part of the time was spent in sewing and over-sewing the bowel, and, as one knows, this can be handled freely without causing pain even when no anæsthetic has been used. From twenty to twenty-five minutes is about as long as one can count upon the anæsthesia lasting.

Eucaine is cheaper than cocaine, and considering the drug all round, it has a great deal to recommend it. The one thing against it is its family name:

"Eucaine is the methylester of benzoyl-n-methyl-tetramethyl-gamma-oxy-piperidine-carboxylic acid!"\*

\* *British Medical Journal*, January 16th, 1897.



## Concerning the Ship's Surgeon and some Tropical Diseases.

By W. H. MAIDLOW, M.D. Dunelm., F.R.C.S.,  
Late Surgeon P. and O. S.S. *Caledonia*.

(Continued from p. 135.)

### PART III.—TROPICAL DISEASES.

**B**ERI-BERI (Kakké of Japan) is a very interesting peripheral neuritis, probably due to a specific organism endemic in India, Ceylon, and Australia. Its name is probably derived from the Arabian "bhur," dyspnoea, and "bhari," maritime, according to Carter, in allusion to the frequent mode of death in this disease. Of its symptoms pages might be written, but it must be seen to be realised; and it can be always seen at the Dock Hospital, where a most courteous house surgeon will show them, or Dr. Manson would make an arrangement to let men go round with him. It is a most important disease for an intending ship's surgeon to realise, so indefinite and insidious its onset, yet withal, like the puzzle, so clear when it has been pointed out, that one wonders at one's blindness. It is the disease *par excellence* that is mistaken for malingering. As Dr. Manson eloquently says (in his article "Beri-beri," *Tropical Disease* \*), "malingering is only too common in native crews: . . . it will be well, however, to pause before pronouncing such a diagnosis. Too often in such cases the possibility of beri-beri is overlooked, and the man who is pronounced a malingerer to-day is found dead in his bunk to-morrow morning." The first case I saw which I put together to mean beri-beri subsequently, I sent to bed without a diagnosis. I found him dead twelve hours afterwards, probably from syncope. Beri-beri occurs in two forms, the *wet* and the *dry*: (1) the *wet* is an example of anasarca without usually albuminuria, with the addition of peripheral neuritic symptoms; (2) the *dry* has very slight oedema of the legs and thorax, there are calf pains, anæsthetic patches, girdle pains, absent knee-jerks, an irregular and dilated heart, and the gait is characteristic from the foot-drop,—in fact, it is a peripheral neuritis due to beri-beri, and diagnosed as thus due, because a Mussulman or Hindoo does not drink strong waters to any extent, there is no syphilitic sign or history, he has not had diphtheria, and there is nothing else to account for the condition. Death, however, is imminent from cardiac or diaphragmatic failure due to vagal involvement. Consequently, any native with an irregular pulse, absent knee-jerks, and calf pains must be put off duty at once. There are no ocular symptoms, but the condition may simulate locomotor ataxia. A poor man who says he feels weak and has pains in his legs, and cannot describe what he feels, who can only say he cannot work, in the hurry of the moment is easily accused of

shamming; and the worst of it is the disease seems most prevalent in those arch shamblers, the Punjaubis. During my "reign" in the "Caledonia" I had six cases, two of whom died, one from syncope and dysentery, another from pulmonary oedema; two were lost sight of in Bombay, and the fifth, also dysenteric, left in the hospital for five months with a grave anæmia, which I have just heard has been satisfactorily treated by a preparation of dry hæmoglobin. Nothing much can be done for treatment, but rest, tonics, and good sufficient food are very necessary. The stomach must on no account be loaded, or the heart will be affected by the easy dilatation of a paretic stomach.

*Hepatic* disorders need a word in passing, because not many years ago, as in England, but with probably much more reason, an obscure disease was "liver out of order." The predisposing causes to *organic* disease, hepatitis, may be considered the exciting of *functional* disorders; and those which are most obvious are (1) the effects of the high temperature, which seems at first to stimulate, then to diminish the secretion of bile; (2) the lessened pulmonary action throws increased work on the liver; (3) there is a distinct blood deterioration marked by anæmia, probably due to increased corpuscular destruction, which probably occurs in the liver; (4) over or wrongly eating and drinking, a cause now-a-days probably not so important as formerly, when there was not so good adaptations to climate, the meats and beers of England having now yielded to lighter foods, whilst whisky and soda may be considered the European drink, although Pilsener and Lager beer has its advocates; (5) dysenteric processes acting through the portal system must influence the liver to some extent for evil.

It is impossible to discuss all the forms of hepatitis, but the forms are best divided into (a) functional and (b) organic. The step from functional to organic disease is no great one; the "livery" subject may at any time show signs of acute hepatitis. But the old "Nabob's liver" and person are more talked of than seen, that rich relative of the romances, yellow-skinned, irritable, ever thinking of past glories. What one generally meets with is impaired digestion, with some or all of such symptoms as heartburn, flatulence, nausea, and sometimes vomiting, irregularity of the bowels, stools pale and offensive, coated tongue, a sallow rather than jaundiced skin, a tendency to sleep, and urine loaded with urates; there may be tenderness and fulness over the liver. The temper is often horrid. I can call to mind many such cases.

*Treatment* applied to the liver is more efficacious than to the rather clamorous stomach. The diet must be regulated to blandness and absorbability, and moderate exercise recommended. In acute attacks, which on board ship are caused often by a chill or the change of temperature (from a temperature of 90° F. in the Red Sea to 60° in the Mediterranean in less than seven days is a severe strain for

\* Edited by Davidson.



a vaso-motor system that has done its duty in India for years), a hot bath and blanketing do much good, which are to be followed up by a pill of podophyllin or rhubarb, with or without some calomel, according to the patient, and on the following day a large dose of magnesia or seidlitz powder. If after this the patient "hangs fire," a mixture of chloride of ammonia and gentian usually succeeds. When these people are found in England I am told the judicious use of a Turkish bath does good. In one case where there was much tenderness I kept a compress of nitro-hydrochloric acid (3j—Oj) for twenty-four hours over the liver with success. Children also suffer much in the same way, and functional liver seems to cause their occasional epistaxis. When dietary causes have been excluded, a mercurial purge, followed by castor oil and a mild diaphoretic, with minute doses of ipecacuanha for twenty-four hours (if relief is not speedy) soon corrects this. Of course these cases are not so simple as may seem from this brief notice, yet the ordinary type is as stated. Of B, the *organic* condition, the following subdivisions seem to cover most cases. (1) Acute hepatitis due to the causes above mentioned, but excited by cold, malaria, dysentery, and alcoholism. This may become (2) chronic hepatitis, the symptoms of which are often difficult to distinguish from those merely of functional disorder. (3) Abscess of liver. This may arise in four ways: (a) from dysentery,—this is not so clearly proved as the books lead students to suppose; (b) from acute hepatitis NOT due to dysentery, probably the most usual cause; (c) from pyæmia not due to dysentery; (d) from gall-stones. Practically these so-called tropical abscesses may be divided into (a) the pyæmic due to dysentery or other septic conditions of the intestines or elsewhere; (b) the simple or ordinary, due to acute hepatitis from whatever cause arising, and as often as not, perhaps, there is no particular history of anything. (4) Another hepatic disease is the amyloid, and that so often missed, I believe, syphilitic disease. Many livers sent home from India get remarkably well from potass. iodide. This at least was my experience at Taunton, where a large number of troopers from Burmah came for treatment. Gall-stone is said to be rare in India by some, and denied by others. Two cases came under my observation, and I saw several in the hospitals.

The treatment for acute hepatitis must be energetic, the possibility of suppuration being remembered. In those cases where abscess is threatening, fever is irregular and hectic, with profuse nocturnal sweating, a dull pain in the right shoulder, and localised tenderness over the liver, of which the area feels full, and may be œdematous; there may be diarrhœa, urine is scanty and of high specific gravity, and there is probably nausea, vomiting, and a dirty furred tongue. In the presence of such symptoms, if exploration be not done, order rest, restricted diet, free purgation by mercury and salines, hot fomentations and leeches to liver, ammonia chloride, nitro-hydrochloric acid,

and ipecacuanha internally. This treatment seems to cut short the hepatitis very often, but no one hesitates to explore if relief is not speedy. Acute simple hepatitis is marked by a feeling of weight in the liver region, pain in the shoulder. The skin is of a faint yellow colour; there may or may not be fever, but the disease is often ushered in by a rigor. It is difficult to describe the symptoms well. Acute hepatitis is, in fact, one of the ordinary results of catching a chill in India, where the above-mentioned predisposing causes exist. Instead of acute nephritis (of which I have never seen a case in India, and they are said to be rare), or pneumonia, or bronchitis, the result is hepatitis, or a recrudescence or first attack of ague or dysentery. In all the above conditions of liver jaundice is not well marked as far as one can judge from a limited experience, and excluding gall-stones the functional forms give rise to it the most often, the pathology of which may be rather paradoxically called a catarrh; people often say, "You doctors always say everything is a catarrh."

*Sunstroke* from a pathological point of view had better be called *heat-stroke*, inasmuch as it seems the heat rays that cause the troubles, and exposure to non-solar heat, or at least not directly solar (for, of course, *any* heat on earth may be considered originally solar), causes many of the same symptoms, and thermal symptoms are most prominent in most cases. Nevertheless the actinic elements may play a part in the face of recent evidence of superficial and deep lesions caused by the X rays (*vide* Notes, "Clinical Journal," vol. x, No. 1). Fayrer's seems, however, the best definition when he says, "Under sunstroke are included these pathological conditions and their concomitant symptoms, which are due to the effects of excessive solar or artificial heat generally, though not invariably to the former, which occur most frequently in tropical and sub-tropical climates, especially under peculiar atmospheric and meteorological conditions." In whatever form the result occurs the essential lesion seems vaso-motorial, whether the main symptoms be respiratory, cerebral, or circulatory. It explains best the shock, asphyxia, and the nervous symptoms, internal hæmorrhages, and the hyperpyrexia, as will be obvious if the chief types be considered. Meteorological conditions are also very important, the "relative moisture" especially so. The relative moisture point will almost invariably be found high when many cases occur. With low moisture percentage the temperature may be quite inadequate to cause the symptoms; and for the same reason, whatever that be, most deaths in the Turkish bath occur when the skin fails to act, and the hot temperature of the vapour-bath has a temperature able to be borne much less than that of the dry and Turkish bath. Most cases of sunstroke on ships occur in the Red Sea, where my wet bulb thermometer (Daniel's) rarely registered less than 85°—90° of humidity according to Glaisher's Tables. Due to solar exposure, the occipital and temporal regions seem the

most vulnerable parts, and sunstroke is especially liable to occur whilst bathing, when again the skin is not acting; due to heat and at sea, in the engine-room, or exposure on deck. Overwork and exhaustion from any cause are the great predispositions. The following are the chief varieties usually seen:—1. Syncope and shock, which seem merely matters of degree. Thus W. H—, steward, in the Red Sea, with temperature in shade  $86^{\circ}$ , degree of humidity 89 per cent., said he felt giddy, suddenly became unconscious, and remained pulseless, cold, and pale for nearly five minutes, temperature subnormal, remained giddy and weak for three days afterwards. This type requires cardiac stimulants, fomentations, and rubbing externally. I have not met a case of this kind where death was imminent, but they are the cases where a man falls as if struck, and post mortem is found a dilated heart, and perhaps a cerebral hæmorrhage. If recovery occurs—and the same condition may result in the syncopal variety—the temperature may run up to a high degree; there may be paralysis somewhere, and persistent headache or a mental disorder, perhaps having a physical basis of meningitis, and pleurisy, with or without effusion, and pneumonia may also occur, all perhaps due to internal congestions. The previous history—such as of injury, alcoholism, debility—plays a great part in determining both the onset and the results.

Perhaps the following is such a case, the result of injury. A lieutenant was found two days after leaving port who had not the slightest idea how he had travelled from Central India, and how he had got aboard; everything was to his disadvantage to have done so. He gave a history of unconsciousness from injury three months previously. In the severer cases sometimes bleeding to relieve the over-distended right heart does good, and purgation by calomel or other drastic purge, recumbency, and quietness being requisite also in all cases. But usually most reliance is placed upon cold douching to reduce the temperature, which soon runs up in the shock cases, and to arouse by reflex action. As a matter of fact, however, it is difficult to describe the treatment dogmatically, because each variety is often so badly marked, the shock or syncopal becomes the second variety, viz. thermal, and all of them may have the same sequelæ. They are, in fact, but clinical varieties of the same disorder. In the pure syncopal and shock cases it seems to me that the treatment should be directed to the heart; bleeding must not lightly be undertaken at least until diffusible stimulants (by mouth or rectum), mustard poultices to body and legs, &c., have had a fair trial. For the sequelæ, the ordinary treatment for the condition present. Sunstroke is an undoubted exciting cause of many a case of insanity.

2. The *thermal* variety is very well marked. It may be described as acute or subacute. The acute begins in two ways: (1) where the patient becomes suddenly comatose (heat apoplexy), and with reaction hyperpyrexia occurs; or

(2) where the onset is gradual. An example of (2) was Col. Y—, the notes of which I have from my successor, Dr. Felvus, and as the symptoms and treatment are typical I give the case in brief outline.

July 30th.—In Red Sea, felt ill, temperature  $102.5^{\circ}$ , sod. salicylat. (to relieve joint pains) grs. xv statim.

July 31st.—Temperature in morning  $102^{\circ}$ , evening  $105.2^{\circ}$ , at 9 p.m.  $106.2^{\circ}$ . Given quinine and antipyrin,  $\text{aa}$  gr. xx; 10 p.m. delirious, incontinence of urine and fæces, placed in an ice-bath, temperature  $60^{\circ}$ , and cold douching to head; 11 p.m., temperature in rectum  $109^{\circ}$ ; 11.30 p.m.,  $109.2^{\circ}$ , body rubbed with ice; at 12.45 temperature of bath  $40^{\circ}$ . Temperature of patient had gradually fallen to  $104.5^{\circ}$ ; blanketed, whisky, &c.

August 2nd.—Improvement maintained, calomel gr. v given. A slight febrile relapse occurred subsequently, but the patient ultimately made a good recovery. The temperature of the air had not been particularly high, probably between  $80^{\circ}$  and  $90^{\circ}$  F., but obviously, apart from a consideration of other meteorological states, no one can say what the "sunstroke temperature" is.

Sub-variety (2) is often very obscure. Some one on a certain day is exposed to the sun or other heat, a day or two afterwards he feels ill; there may be a rigor or some gastro-hepatic intestinal symptoms, and a continued or sub-remittent fever lasting ten days or more. This is the ardent, thermic, or sun fever. It requires diagnosis from malaria or typhoid; e.g. I. R—, æt. 7, had never been out of England, sat on deck with uncovered head; in evening had a rigor, and for three days a rigor at 5 p.m., with intervals of moderate pyrexia, some splenic enlargement, and jaundice and headache. She got quite well with minute doses of calomel and phenacetin, gr. x daily. G. R—, æt. 17, was disappointed in love, and walked about in Egypt with a small cap on his head. Next day diarrhoea, tender abdomen without distension, thickly coated tongue, and for four weeks a subremittent temperature between  $100^{\circ}$  and  $101^{\circ}$ . On shore was seen by a doctor, who diagnosed typhoid, which the subsequent events entirely disproved.

Prophylactic treatment is of the first importance; prevention from fatigue, regular habits, temperance, good ventilation, light food, careful protection of the head by a whitened topee of pith, in which lightness, reflection of rays, and ventilation are assured; tinted glasses, pads to spine are sometimes necessary. Clothes of a light white woollen texture are best. Exercise and work out of doors must be done in the cool hours by morning or evening; in the afternoon comes the siesta, that sixth hour when wearied lies under the grateful breeze of the punkah the "son of the morning." No one if possible works then. The "son of the morning" is the traveller. The Biblical story of the Shunammite widow's son (2 Kings iv. 18), who had gone to find his father with the reapers, who cried

"My head! my head!" and who was taken home and presently appeared dead, reminds me of other methods to restore the unconscious, for Elisha the prophet appears to have given some errhine—the boy "sneezed seven times"—and done artificial respiration by direct inflation; "he lay upon the child, put mouth to mouth," &c.

My knowledge of *leprosy* was obtained in a visit to the great Leper Hospital at Matunga. I gleaned the following facts about it:—(1) Most "leprosy" of Leviticus is not leprosy at all, the mistake having arisen doubly from having translated the Hebrew word into *lepra*, and confusing the Greek *lepra* (any scaly eruption, e.g. psoriasis) with leprosy as we know of it in England, and from confusing elephantiasis arabum (filariasis) with elephantiasis græcorum (true leprosy). (2) Much has been called leprosy that is really leucoderma or vitiligo (the alphas of Celsus). (3) The leprosy of Leviticus and elsewhere, except in the possible case of Uzziah (of whom nothing else is told but that he was a leper), was probably leucoderma or psoriasis ("as white as snow"), syphilis, eczema, elephantiasis arabum, tinea, impetigo, or scabies (where the house required disinfection) (Lev. xvi. 38), &c. (3) There is not the slightest relation between leucoderma and leprosy. (4) The early changes in colour may be a dull paleness, increased pigmentation, or redness from hyperæmia. (5) Early nerve leprosy and syringomyelia and Morvan's disease may be much alike. (6) Pure nerve leprosy is rare, the usual form is the combination with tubercular or nodose. (7) In the tubercular or nodose form the ulceration is often determined by the state of the general health. (8) The resulting cicatrices look on superficial view like leucoderma. (9) The eyeball often sloughs, the premonitory symptom being a sort of pannus. (10) Orchitis is quite rare, so direct infection of a mother by this means is not likely. (11) Various arthritides are common, and are relieved by salicylates, and they may be considered due to trophic nerve influence analogous to Charcot's disease, and throw a possible light on the pathology of other arthritides which the lesions resemble. (12) Syphilis, tuberculosis, and elephantiasis arabum form complications that should be remembered. (13) At Matunga marriage between the inmates is encouraged, but they are usually not fertile. In four years out of seventy matches four children were born, of whom one died. One lived till youth and died free from leprosy, two became leprous. (14) Infection rarely results from contagion, heredity gives a predisposition only. (15) Those who use chamoogra oil externally or internally do best. (16) Exacerbations of fever occur, and seem to be due to a lymphangitis. The mental state of the patients now *not* compulsorily isolated is by no means one of unhappiness or gloom; they have their tailor, wise man, priest, and carpenter, the little colony of lepers live day by day working and playing, marrying, and contemplating nature, and shrugging their shoulders at Kismet. One meets with the

greatest courtesy from the Parsee native doctor there, and the visit is well worth while. In signing one's name one has to make some remark. "Would I were a leper here!" is some one's; certainly a worse fate awaits many of us.

*Malta fever* deserves notice because it may turn up in a large practice which includes old residents abroad, in whom, just as in malaria or dysentery, some exciting cause, such as cold, debility or ill-health, the partially extinguished flame will rekindle. The people who may thus suffer are the army men and their wives or children who have been quartered at some of the Mediterranean ports where the disease is endemic, although each locality may have its own name for it; e.g. at Gibraltar it is rock fever, at Malta, Malta fever, at other ports Mediterranean fever. This local naming is very common indeed abroad: just as each little town, wood, highway, amongst Hindoos has its own little but identical deity, so we recognise under the name Oriental sore, the Delhi boil, the bouton boïl or sore of Aleppo, Bagdad, or Mooltan, but it is doubtful whether it be quite correct to say jungle fever. Marsh fever and the many other names which are supposed to be merely local conditions of the same thing are really identical with simple malarial fever. The tendency to progress in medicine is to analyse disease; and just as typhoid was separated from typhus, so Malta fever is one of those triumphs of analysis from the group of simple "fever," whilst the opposite process of synthesis is suspicious of retrogradation, to give an example of which I need only mention gout, rheumatism, and osteo-arthritis, for which some find a similar pathology. At Gibraltar I learnt that twenty years ago most diseases were grouped under the word "fever;" now there are recognised rock fever, typhoid, ague, remittent fever, and a class of diseases requiring investigation, viz. bilious remittent, gastric and slow continued. Much must be expected from bacteriology and the microscope, if history repeats itself. Malta fever itself has been differentiated both from malarial and typhoid fever; it is, however, even now by some, from its likeness to both these diseases, called typho-malaria. Three things, however, seem certain: (1) that in no case amongst the 3 per cent. mortality have intestinal ulcers been found, and (2) in pure cases hæmatozoa are not found; (3) Bruce has found micro-organisms—*Micrococcus melitensis*—which are not found in either disease, and which I believe cause an analogous fever in certain apes; but as far as I can understand an article in the 'British Medical Journal' (May 15th, 1897), the serum diagnosis from typhoid is not very easy.

I have had experience of five cases—one a child, in private practice, who had left Malta (Valetta, where the disease is most frequent) three months previously, and four who were soldiers sent home on sick leave, two from Malta, one each from Salonika and Gibraltar. The ordinary moderate attack may be described somewhat as follows:—An onset like typhoid, usually insidious, a vague illness with anorexia, inability to work well occasional



shivering and frontal headache. Then at the end of a week the patient comes for relief, and examined we find him with a temperature varying from  $101^{\circ}$  to  $103^{\circ}$ , perhaps some signs of basic congestion, an enlarged and tender spleen, and occasionally a tympanitic abdomen, all of which signs point to typhoid, and when no spots appear the diagnosis is still not altered. About the thirteenth day the patient is anæmic and slightly icteric; there is still constipation, the tongue is covered with a white fur, and there have been profuse perspirations with sudamina. There is no special discomfort. The temperature keeps of a remittent type, between  $101^{\circ}$  and  $103^{\circ}$ , and gradually falls to normal during the third or fourth week. There may or may not be rigors. During this third period of fall of temperature the so-called rheumatism occurs, marked by synovitis of one or more joints, indistinguishable indeed from ordinary rheumatism; and after this there may be, for perhaps some months, waves of gradual rises and falls of temperature up to  $103^{\circ}$  or  $105^{\circ}$ , lasting eight to ten days, with fresh rheumatic attacks which are diagnostic, and are especially helpful when they occur, as they may, rather earlier. During this period the patient's anæmia increases, he is languid, despondent, and much emaciated. Death is rare, and recovery is fairly rapid, but certain, when the pernicious climate is left. Three of the cases I had charge of were in the third stage, but one, unless I had not been convinced by a very experienced naval surgeon, I should have considered typhoid. Diagnosis from typhoid rests on the absence of spots, duration and character of the fever, the rheumatic symptoms, and the sweating, and, of course, where possible, on bacteriological observations. The poison seems to be carried in the drinking-water, and to live best in insanitary conditions; just as typhoid fever, it is worst in the summer months, and attacks adults especially. It is not contagious. As regards treatment, prophylaxis by removal of the patient and improvement of sanitation is obvious. Little can be done by drugs: quinine seems useless in pure cases; salicylate of soda, although said to be no good for the joint pains, in my little experience certainly is very useful; but iron, which would seem indicated for the anæmia, must be given cautiously, for, as in rheumatism, it is very apt to cause fresh synovitis. On the whole mild tonics are best. For the fever tepid sponging is probably better than antipyretic drugs. The diet is very important; during the uncertain diagnosis fluids alone are of course admissible, but as soon as conditions admit as much sustaining food as possible must be given,—cautiously, however, for too much will inevitably produce fresh fever and synovitis. The constipation must be treated by the usual methods.

The sad news of the death of G. H. Forman in the wreck of the s.s. "Aden" has been but too certainly confirmed. Already I know he had made himself beloved by

both officers and crew (the best tribute possible), by his geniality, kindness, and care. Doubtless he did his duty to the last, as we shall soon hear, gallantly and well. He will leave a blank in the affections of many men.

(To be continued.)

### Case of Diabetes Mellitus with Coma.



THE patient, Henry B., æt. 48, was readmitted to Luke Ward under Dr. Gee on February 2nd, 1897, complaining of weakness, giddiness, wasting, and delirium.

*History of present condition.*—Was in Luke from April 14th to July 18th, 1896, when he was found to be suffering from morbus cordis (aortic regurgitation) and anæmia (? pernicious). Before going out he complained of numbness round the stomach, and had some conjunctivitis. He attended as an out-patient and remained fairly well until December 29th, when the note was "exophthalmos marked especially in right eye, cramps in calves for last three weeks, knee-jerks present but sluggish." On January 12th patient said that he was passing much urine, and his wife said that he had been "very tottering" on his legs for the last fourteen days. He has been in bed for four days, and has been very drowsy. For the last two days he has "rambled" at night, has no appetite, but has not vomited. He passes a great deal of water. Bowels have not been opened for "three weeks." His speech has been getting thick for four or five days, and he sees spots before his eyes.

*Past history and family history not obtained.*

*Present condition.*—Patient on admission looked much thinner than when last in the hospital. His eyes are much more prominent, due probably to absorption of orbital fat. Eyes react normally. Tongue clean and very dry. Breath has a sickly sweet acetone odour. Speech is thick and hard to understand. He is very drowsy and is roused with difficulty, falling to sleep again at once. Neck thin, some pigmentation; has taken arsenic for some time.

*Chest* poorly covered, moves well. Lungs, nil abnormal found. *Respiration* 16, deep and slow.

*Heart:* cardiac dulness not made out. Apex-beat in sixth space in nipple line. Impulse extremely feeble. Sounds weak but fairly clear. No murmur made out. Pulse 76, soft, small, artery thickened.

*Abdomen* flaccid, much pigmented, especially in lower part. Many scybala felt. Legs wasted. Knee-jerks lost. Arms normal, a slight papular rash on forearms. Urine 1028, acid, no albumen, much sugar. Is passing his urine in bed. Has taken liq. arsenicalis  $\mathfrak{mij}$  ter die for many months. Enemata given in the surgery brought away a few scybala.

February 3rd.—Slept soundly all night, and tends to sleep all day, though he can be roused.

*Blood examination.*—Red corpuscles, 4,480,000; white, 24,000; hæmoglobin, 32 per cent.

On June 8th, 1896, when he was in Luke the blood examination was—red corpuscles, 1,591,000; white, 8,000; hæmoglobin, 28 per cent.

February 4th.—Could not be roused during the night or this morning. Died comatose at 11.50 p.m.

Temperature since admission has been subnormal.

When admitted he was given calomel grs. x statim and acidi lactici dil.  $\mathfrak{ss}$ , aq. ad  $\mathfrak{ij}$ , quartis horis.

On February 4th, 12.30 a.m., liq. strychninæ  $\mathfrak{mij}$  statim.

*Post-mortem note.*—External appearance pale and emaciated. Head, no examination.

*Chest:* lungs, old adhesions at both apices, both emphysematous and oedematous. Heart, 11 oz. Adherent pericardium, no fluid; adhesions firm and old. Right side a little dilated. Mitral valve thickened and shrunken. Chordæ tendinæ thickened and shortened. On the auricular surfaces of the valves were some isolated vegetations, not forming a continuous row. Aorta and vessels showed some atheroma.

*Abdomen:* peritoneum dry. Some old adhesions among the coils of the small intestine. No obstruction. Stomach and intestines natural. All the tissues in the abdomen were very dry. Large intestine full of hard faeces. Liver, 52 oz. Did not give "blue colour" reaction with potassium ferrocyanide and HCl. Surface covered with old adhesions.



Spleen shrunken, old adhesions to surrounding structures; capsule wrinkled.

Pancreas looks atrophied, not unusually hard.

Abdominal lymphatics and supra-renal bodies natural.

Kidneys, 5 oz. each; pale, capsule adherent.

Bladder somewhat dilated. Vermiform appendix  $5\frac{1}{2}$  inches long, hanging into pelvis.

*Remarks.*—This case presents several points of interest. In the first place it demonstrates the difficulty often attending the diagnosis of cardiac lesions. The adherent pericardium was not suspected; its diagnosis was, of course, out of the question.

After careful examination and much discussion the valvular lesion was decided to be aortic incompetence; *post mortem*, mitral incompetence was the most prominent lesion.

The condition of the blood during the patient's first stay in the hospital was such that Dr. Kanthack reported in favour of pernicious anæmia. On readmission the blood presented the features of simple anæmia. That cases of so-called grave or pernicious anæmia frequently recover, temporarily at least, is not sufficiently insisted upon in the text-books. From the same ward last year a patient with all the signs of grave anæmia, on examination of the blood, was after the futile exhibition of iron, arsenic, oxygen, bone marrow, &c., allowed to go home unbenefited. A few days ago he returned in perfect health.

With regard to the diabetes, two points are noticeable. The duration was short, apparently less than seven months; no sugar was detected in the urine during the patient's first stay in the hospital. The type of coma is of interest, beginning as the drunken form. When admitted, the patient's gait was staggering, and his speech thick and unintelligible, so much so that it was suggested that he had been drinking. On approaching him, however, the sickly sweetness of his breath revealed the true cause. He gradually became more somnolent until his death.

The *post-mortem* appearances were such as are usually found in such cases. It is difficult to explain why peritoneal adhesions should so frequently occur.

## Surgical Notes.

*Some cases recently culled from the wards of distension of the gall-bladder with gall-stones, with a renal case simulating the above, reported by permission of the Surgeons in charge.*

1. A case of distension of the gall-bladder with gall-stones, which was sent up to the hospital as a case of moveable kidney. E. R.—, a woman æt. 43, was admitted into Stanley Ward under the care of Mr. Bowlby on March 24th, 1897.

*History of present condition.*—On December 29th, 1896, the patient was suddenly seized with an attack of pain in the region of the navel, accompanied by vomiting of yellow matter, the attack lasting three days.

On January 2nd, 1897, she was again seized with a severe attack of pain with vomiting, lasting ten hours, the vomited matter being greenish in colour.

She has had no further attacks of vomiting, but almost constant pain, especially after walking, usually localised to the right side of the abdomen, but shifting about, and worse when under the ribs. She has never had jaundice, or passed blood or gravel in her urine.

*Present condition.*—On examination there is in the right hypochondriac region a well-defined, smooth, hard swelling, regular in outline, which on pressure slips up under the liver and seems to be continuous with the lower border of the liver. It has the ordinary characters of an enlarged gall-bladder, being about three inches in diameter. The tumour is painful to the touch, and the pain is referred to the right hypochondriac region and not to the loin, shoots across to the umbilicus, and upwards but not downwards. Urine 1024, acid, slight trace of albumen.

April 2nd.—Mr. Bowlby cut down upon the gall-bladder, which was found greatly distended with fluid, and bound down to the under surface of the liver by adhesions. Ten ounces of clear yellow fluid were drawn off with the aspirator, and five gall-stones extracted, varying in size from a cherry stone to a Brazil nut, the largest of which was found impacted in the mouth of the duct. The gall-bladder was then fixed to the peritoneum, and the edges of the opening in the gall-bladder stitched to the parietes, and a drainage-tube inserted.

Patient made a good recovery, and left the hospital on May 7th. The tube had been taken out, but there was still a slight discharge of bile through the wound.

2. A case of distension of the gall-bladder, which on consultation was thought to be renal. C. S.—, a woman æt. 59, was admitted into President Ward on April 3rd, 1897, under Mr. Willett's care, suffering from pain and swelling in the right side of the abdomen.

*History of present condition.*—In June, 1895, patient first noticed a lump in the abdomen about the size of a small egg, her attention being drawn to it owing to a sharp pain in the side. She has never had jaundice, renal or biliary colic. The lump has got gradually larger, and causes more pain, especially when she is moving about. She has had nausea before meals for the last twelve weeks.

*Present condition.*—Nearly in the situation of the right kidney there is a moveable swelling, rounded and slightly elastic, moving slightly on respiration, with well-defined edges, and about the size of a foetal head. The lower boundary is well above the pelvis, the upper border below the ribs; it extends to the middle line of the abdomen, and is dull on percussion. Urine 1020, acid. No albumen, sugar, or blood.

April 10th.—A consultation was held, and the general opinion was in favour of the tumour being renal, and an operation was advised.

April 20th.—Mr. Willett cut down on the tumour from the front, and found it to be the gall-bladder much enlarged, and with thickened walls. Ten ounces of thick muddy-coloured fluid were drawn off with an aspirator. The gall-bladder was washed out, and a calculus the size of a walnut, with a nodulated mulberry-like surface, removed. Another calculus was found impacted in the cystic duct, which was broken and removed, and was exactly similar to the other except for the presence of two facets. The gall-bladder was stitched to the peritoneum, the margin of the wound stitched to the parietes, and a glass drainage-tube inserted.

May 17th.—Patient has made a good recovery, and has now no pain. There is now no discharge, and the wound has almost healed.

3. A. S.—, a married woman æt. 31, was admitted into Paget Ward under the care of Mr. Lockwood on April 26th, 1897.

*History of present condition.*—About the end of February the patient first began to have sudden sharp attacks of pain in the abdomen, in the region of the gall-bladder (and nowhere else). She had no vomiting, but felt faint during the attacks.

*Present condition.*—In the lower part of the right hypochondrium, in the region of the gall-bladder, a hard irregular and nodular lump can be felt, about the size of a tennis ball, which is freely moveable, as is also the abdominal wall over it. Its lower border is on a level with the umbilicus, and it can scarcely be felt in the loin. It is not adherent to the surrounding parts; it moves with respiration, and is rather painful if pressed on. Patient has never had jaundice, or renal or biliary colic. Urine 1020, acid. No albumen, blood, or sugar.

May 3rd.—Mr. Lockwood opened the abdomen, and found the gall-bladder deep down and adherent to the under surface of the liver. The gall-bladder, which was distended, was opened and washed out, and a large stone extracted with some difficulty from the cystic duct. A glass drainage-tube was inserted, and a purse-string suture drawn round to avoid escape of bile between the tube and wound, and the gall-bladder secured to the abdominal walls. The gall-stone on examination was very light, about two and a half inches long and one inch broad, and had no facets, dark green in colour with yellow specks.

May 9th.—Made a satisfactory recovery. Patient has only slight pain, and very little discharge; the tube has been removed.

4. A case of hydronephrosis simulating the above cases of distension of the gall-bladder. H. C.—, a woman æt. 45, was admitted on May 5th, 1897, to Paget Ward, under the care of Mr. Butlin, suffering from pain in her right side.

*History of present condition.*—About two and a half years ago she was suddenly seized with intense pain in her right side, which was followed by vomiting, and she then noticed a swelling in her right side in the neighbourhood of the right kidney. The pain has been just below the costal arch, exactly in the region of the gall-bladder; it has always been most severe in this situation, although it sometimes goes down to the right groin and thigh. She usually has attacks of pain every three or four weeks, and between the attacks the swelling usually goes down; of late the attacks have been more frequent. She has never had jaundice.

*Present condition.*—No swelling can be felt in the usual region of the kidney in the loin, but in the situation of the gall-bladder there is a round smooth tumour as big as a tennis ball, attached to and apparently moving with the liver. It is not tender. The lower

border is above the level of the umbilicus. She passes her water fairly regularly, but rather more often between the attacks than during. Urine 1022, acid. No albumen, sugar, or blood.

May 11th.—Mr. Butlin cut down upon the gall-bladder but found it normal, and on exploring found the swelling to be connected with the right kidney; the abdominal incision was then sewn up, and a lumbar incision made over the right kidney. A fluid swelling was found, and a dissector passed into the tumour through the kidney substance, and a quantity of clear fluid evacuated. No stone was found in the kidney. The wound was drained.

*Remarks.*—The above cases illustrate the difficulty of diagnosis between "gall-bladder and kidney." We notice—

1. Entire absence of jaundice.
2. Sudden spasmodic attacks of pain.
3. Pain localised to region of gall-bladder, and not shooting down.
4. A tendency to nausea and vomiting.
5. That the swelling is generally higher up and further forward than the kidney, and that it can generally be felt through the loin.
6. That the patients are all of the weaker sex.
7. That they are of "middle age."

### Notes of Two Septic Puerperal Cases.

**T**HE notes of the two following cases, kindly sent to us by Mr. P. O. Andrew, M.R.C.S., L.R.C.P., may prove of interest as belonging to a series of four or five in which the source of infection could be definitely traced to the same midwife, who had come from a case which subsequently died of puerperal septicæmia. It is needless to add that she was promptly stopped from attending confinements.

CASE 1.—On June 30th I was called to attend a primipara 21 years old, who had been in labour six hours. I found the head low down on the perineum, and, on account of the weakness of the pains, delivered with forceps, using every precaution. There was very little laceration, and the placenta came after twenty minutes *in toto*.

July 1st.—Temp. 102°2'. Pulse 120. Slight tenderness over uterus. Lochia somewhat scanty. Tongue slightly furred. Patient restless; had only slept two hours. I gave a vaginal douche, and quinine and opium powder.

2nd.—Temp. 103°2'. Pulse 95. Lochia scanty, but sweet; no clots. Patient had slept well. There was some milk in the breasts. An intra-uterine douche was given.

3rd.—Temp. 104°8'. Pulse 100. No change otherwise. Patient slept well, and takes food well. Bowels open. Tongue red but clean.

5th.—Temp. 105°. Pulse 100. Tenderness increased over uterus. Slight distension of abdomen; intra-uterine douche given. General aspect of patient is good. She sleeps six or eight hours every night, and takes broth, &c., well. Bowels open twice. Tongue furred.

6th—10th.—Distension of abdomen gradually increasing; no tenderness. No milk in breasts. Lochia almost absent, perfectly sweet. Retention of urine relieved by catheter. Temperature irregular, between 106° and 101°. Bowels confined.

6th: 10 p.m.—I injected max of a solution of anti-streptococcus serum in skin between angles of scapulæ.

7th: 3 p.m.—Injection repeated.

8th: 10 p.m.—Injection repeated on buttock; the serum did not seem to have any marked effect on the temperature, however. I noticed intense anæmia at the point of injection. There were no rigors or vomiting.

9th.—An erysipelatous rash appeared on buttock (not starting from point of injection), which gradually spread to vulva and down inner side of thighs; it began to fade at the point of appearance.

11th—13th.—Temperature varied between 105°6' and 103°8', showing a morning rise and evening fall. Pulse about 120, strong and regular. Tongue dry and red. Bowels open six or eight times daily; stools offensive, and of pea-soup consistency. Distension of abdomen great, but very little tenderness. Patient sleeping well, and taking plenty of nourishment. Breasts quite flaccid; no lochia.

14th—18th.—Temperature remains high and irregular. Face puffy. Abdomen less distended. Erysipelatous rash extending down thighs; some œdema of both legs. Tongue dry, and sordes on lips. Passing motions and urine under her.

18th.—Temperature dropped from 105° to normal after a quinine and antifebrin powder. Patient had a rigor and some vomiting, but no hiccough. Diarrhœa less. Perspiration profuse.

19th.—Temperature again 105°, falling to 102° during the day. Distension of abdomen decreasing; rash fading, but considerable œdema and tenderness of right leg.

20th—22nd.—Condition improving. Temperature gradually falling. Less œdema and tenderness of leg. Abdomen soft and natural. Diarrhœa less.

23rd and 24th.—Patient very weak, but temperature coming down. Rash gone; a small bed sore on left hip.

25th—28th.—Temperature normal. Strength increasing. Œdema of leg nearly gone. General condition much better.

The patient ultimately made a satisfactory recovery.

*Treatment.*—Quinine in five-grain doses, antifebrin in five-grain doses, and wet sponging were used to try and control the temperature. In the later stages of the disease the effect of the combined powder was very marked. Digitalis was given to control the pulse-rate; strychnine, ammonium carbonate, and spiritus ætheris co. to support the strength; intra-uterine douches (1—2000 and 1—4000 perchloride of mercury) were given for the first six days; turpentine enemata were used for distension; brandy was given freely (half an ounce every two hours at first, which was increased as the disease progressed). Milk, beef tea, mutton and chicken broths were employed as diet.

*Remarks.*—The anti-streptococcus serum was not a success, possibly because it was not persevered with, but the appearance of the rash caused some alarm, and there seems to be no doubt that it was caused by the injection. I might remark in passing that Burroughs, Wellcome and Co. supply a small bottle of dry serum with instructions to inject 10 c.c., but as a cubic centimetre is a liquid measure, and the serum is dry, it would be better if their directions were more explicit. There was never any offensive discharge except about the eighteenth day, when some muco-pus exuded from the vagina. No localised collection of pus could be made out at any time. The unusual features of the case were the low pulse-rate and the amount of sleep the patient had. She seldom slept less than six hours a night. It seems that one of the best prognostic signs is sleep. I have seen four or five such cases (all attended by the same midwife), and in the two that recovered the patient slept well all through.

CASE 2.—I was called in on July 19th to see a primipara aged 25, delivered nine days previously by the same midwife. Temp. 103°; pulse 120. She was delirious. There was no milk in the breasts. No distension or tenderness of abdomen, and the lochia were absent. I immediately washed out the uterus with 1—1000 biniodide of mercury, and gave 5 grains of quinine and 5 of antifebrin every six hours. The temperature rose on the second day to 104°, and on the third to 103°2', but then fell to normal, and patient made an uninterrupted recovery.

The uterus was washed out four times, and on the first three occasions the lotion was returned blood-stained and thick.

The symptoms here seemed to point to a septic intoxication.

### Notes.

It was very gratifying to Bart.'s men to find that Dr. Thorne Thorne's services at the Local Government Board had been suitably recognised by his having the K.C.B. conferred upon him. We beg to offer our sincere congratulations to Sir Richard on the event.

\* \* \*

MR. BRUCE CLARKE has been appointed Surgical Instructor to the Probationary Nurses.

\* \* \*

DR. F. D. CHATAWAY has succeeded to the Lectureship in Chemistry, held for so many years by Dr. W. J. Russell.

\* \* \*

THE Demonstratorship in Chemistry thus vacated by Dr. Chataway has been filled by Dr. Kennedy Orton, who has the unique distinction of being the only Englishman on whom the University of Heidelberg has conferred the degree of Ph.D. *summa cum laude*.

DR. ORTON was originally a student of St. Thomas's Hospital, and graduated from St. John's College, Cambridge, where he subsequently became Hutchinson Research Student. Recently he has undertaken research work under Prof. Ramsay at University College, London.

\* \* \*

MR. H. J. WARING has been appointed Surgeon to the Metropolitan Hospital, and also Surgeon to the Department for Diseases of the Throat at that hospital.

\* \* \*

MR. J. S. SLOANE has been appointed Assistant Surgeon to the Metropolitan Hospital.

\* \* \*

THE Lawrence Scholarship and Gold Medal has been awarded to G. A. Auden and J. Hussey.

\* \* \*

MR. T. W. H. GARSTANG has taken the D.P.H. at Victoria University.

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THE Commemoration number of the *British Medical Journal* is a publication of permanent value; in a record of the progress of the medical sciences in the Victorian age, it is not surprising to find that Bart.'s occupies a prominent position. The portrait of Sir James Paget is excellent; there is also an admirable portrait of the late Sir George Humphry, whose great work in advancing the study of medicine at Cambridge would entitle him to a high place in such a record if his scientific and professional work did not of itself constitute an adequate claim.

\* \* \*

MR. D'ARCY POWER contributes an interesting account of Medicine at Oxford. We notice also a reproduction of the water-colour sketch of Rahere Ward as it was in 1833, with which we are familiar, from its present position in the ward.

\* \* \*

DESPITE the competition of the *Guyoscope*, our contemporary the *Guy's Hospital Gazette* holds its own. The July number has a useful article, called "Tricks of the Trade," on the important subject of buying a country practice. Another contribution of interest is from the pen of Surgeon-Captain Childe, on "The Pneumonic Type of Plague." He points out that besides the less rapidly fatal form characterised by buboes, there is a more deadly type in which the stress of the disease falls upon the lungs, yielding the physical signs of broncho-pneumonia. The bacilli, though absent from the blood, are abundant in the sputa. Surgeon-Captain Childe points out that this is a very infectious form, for the patient is freely coughing up and scattering round him what is practically a virulent pure culture of the plague bacillus. There is often hæmoptysis. These observations are of considerable interest when we recall the fact that in the "black death" this hæmoptysis was very common, but has been very rare in all sub-

sequent epidemics of plague. It adds another argument in favour of the view that the black death was a hæmorrhagic form of the plague as we now know it.

## Amalgamated Clubs.

### SWIMMING CLUB.

Race.—A 2 lengths handicap race was swum off on July 1st. There were eighteen entries.

1st heat.—1st, A. M. Amsler (9 seconds); 2nd, T. C. Littler Jones (6 seconds). 2nd heat.—1st, E. A. C. Matthews (8 seconds); 2nd, C. Dix (16 seconds). 3rd heat.—1st, A. Hay (3 seconds); 2nd, G. B. Nicholson (6 seconds).

The final was swum on July 21st. It was very close, the first three touching with not more than a second between them. 1st, T. C. Littler Jones (45 seconds); 2nd, E. A. C. Matthews (48 seconds); C. Dix, who was third, will receive a prize, as Jones has already won a first and may not hold another.

### WATER-POLO MATCHES.

CUP TIE.—*St. Bart.'s v. London Hospital*.—Played on July 13th at the Aldgate Baths. In the first half Jones scored for the Hospital. In the second half Walker scored, and then Bennett scored twice. Result, 4 goals to nil.

Team: M. G. Winder (goal); F. G. Richards, T. C. Littler Jones (backs); E. M. Niall (half-back); L. A. Walker, W. Fay Bennett, A. M. Amsler (forwards).

CUP TIE (Semi-Final).—*St. Bart.'s v. Guy's*.—Played at the Southwark Baths on July 15th. The game was a hard one, at the commencement looking as if it would be a nearly even one. In the first half Guy's scored twice, and in the second half they scored four times. Marshall (2), Ash (2), Sells, and Payne scored for Guy's.

Team: M. G. Winder (goal); F. G. Richards, T. C. Littler Jones (backs); E. M. Niall (half-back); G. B. Nicholson, W. Fay Bennett, A. M. Amsler (forwards).

*St. Bart.'s v. London Scottish R.V.*.—Played at the St. George's Baths on July 19th. In the first half Bennett scored twice for the Hospital. There was no scoring in the second half, so the game ended in a win of 2 goals to nil.

Team: C. Dix (goal); F. G. Richards, M. G. Winder (backs); E. M. Niall (half-back); G. B. Nicholson, W. Fay Bennett, A. M. Amsler (forwards).

*St. Bart.'s v. Richmond*.—Played at the Fitzroy Baths on July 21st. Bennett played a very good game for the Hospital, scoring three times in the first half and twice in the second half, while Richmond scored once in each half. Result: 5 goals to 2.

Team: C. Dix (goal); F. G. Richards, M. G. Winder (backs); E. M. Niall (half-back); A. M. Amsler, W. Fay Bennett, F. E. Tayler (forwards).

### RESULT OF SEASON.

Played 10 matches. Won 5, lost 5. Goals for, 15; against, 29.

## The Anniversary Dinner.



THE Anniversary Dinner, popularly known as the "Buck Feast," was held in the Great Hall of the Hospital on Wednesday, July 28th, when a goodly assembly of almoners, governors, and their friends, and the medical, surgical, teaching, and junior staffs sat down as the guests of the stewards. The Treasurer, Sir Trevor Lawrence, occupied the chair. After dinner the Chairman proposed the first three toasts,—"The Church and Queen," "The President of the Hospital and the rest of the Royal Family," "Prosperity to St. Bartholomew's Hospital, and health and ease to the poor patients." This was followed by the toast of the Lord Mayor and Corporation of the City of London, which, in the absence of the Lord Mayor, was acknowledged in a graceful speech by Alderman Sir J. V. Moore. Perhaps the most entertaining speech of the evening was the Attorney-General's. Sir Richard Webster, who was entrusted with the toast of the medical and surgical staff, maliciously confused our senior physician with Dean Church, and our senior surgeon with "the man who made the best crackers." Sir Thomas Smith retaliated by saying that the Attorney-General must have obtained such authentic in-



formation from Webster's Dictionary. Dr. Church made some weighty utterances as to the responsibilities that the advance of medical science laid upon governing bodies. We had hoped for the pleasure of hearing Mr. Rudyard Kipling reply for the visitors, but unfortunately the necessity of his catching a train prevented us from listening to any more "plain tales." His place was taken by Sir Ralph Thompson, K.C.B. Mr. B. L. Cohen, M.P., proposed the health of the Treasurer and Almoners, and Mr. Almoner Coleman in reply proposed the health of the Stewards, the hosts of the evening. Mr. ex-Sheriff Cooper's acknowledgment of the toast brought the proceedings to a close.

During the evening Mrs. Helen Trust sang several songs in her usual finished and charming style, and M. Tivadar Nachez performed some admirable solos on the violin.

### Appointments.

STACK, E. H. E., B.A., M.B. (Cantab.), F.R.C.S., L.R.C.P., appointed House Physician to the Bristol Royal Infirmary.

DINGLE, WILLIAM ALFRED, M.D., Surgeon Captain 2nd Tower Hamlets Royal Engineers (Volunteers), to be Surgeon Captain Army Medical Reserve of Officers.

FERNIE, J. F., M.R.C.S., L.R.C.P., has been appointed House Surgeon to the Staffordshire General Infirmary.

KERSWILL, H., M.R.C.S., L.R.C.P., appointed House Surgeon to the Devonshire Hospital, Buxton.

### Examinations.

UNIVERSITY OF LONDON.—INTERMEDIATE EXAMINATION IN MEDICINE.—*Entire Examination: 2nd Division.*—H. E. J. Lister, C. A. S. Ridout, R. L. Thornley, J. S. Williamson. *Excluding Physiology: 1st Division.*—A. T. Pridham. *2nd Division.*—N. C. Beaumont, A. G. Ede, J. C. Marshall, E. Russell-Risien, F. W. Sheppard. *Physiology only: 2nd Division.*—C. R. Brown, H. Burrows, W. H. Cazaly, J. M. Collyns, H. B. Gibbins, S. H. Millen, A. J. W. Wells.

PRELIMINARY SCIENTIFIC EXAMINATION.—*Chemistry and Experimental Physics.*—H. Falk, R. Holtby, C. R. Keed, S. W. Milner, J. M. Plews. *Biology.*—H. A. Kellond-Knight, E. L. Martin, W. P. Price, E. G. Pringle, E. B. Smith.

CONJOINT BOARD.—The following have passed the final examinations for the diploma of M.R.C.S., L.R.C.P.—W. Beckton, R. P. Brown, J. H. Churchill, E. H. B. Fox, H. J. Godwin, F. Harvey, T. D. Jago, H. E. Jeaffreson, A. W. Lamb, C. W. Mainprise, T. Martin, F. E. Meade, E. C. Morland, H. K. Palmer, C. S. Myers, W. T. Storrs, J. H. Tomlinson, F. Whincup.

FIVE YEARS REGULATIONS.—*Chemistry and Physics.*—F. W. Cheere, N. A. W. Conolly, W. R. L. Drawbridge, F. H. Ellis, G. S. Ewen, F. W. Jackson, J. C. Lewis, L. M. Morris, T. C. Neville, C. L. C. Owen, F. D. Parbury, H. S. Petrie, M. B. Scott, H. H. Serpell, C. S. Woodwork, J. H. Wroughton. *Practical Pharmacy.*—E. P. Court, V. J. Duigan, G. J. Humphreys, W. J. G. Johnson, B. S. O. Mansell, A. A. Meaden, W. P. Miles, D. H. H. Moses, E. W. Price, H. H. Raw, F. M. P. Rice, J. C. Sale, F. E. Tayler, A. R. Tweedie, H. Whitwell, M. G. Winder. *Elementary Biology.*—G. F. Gill, A. Goodall, G. W. Miller, F. D. Parbury, H. A. Woodruff. *Anatomy and Physiology.*—H. C. Adams, T. P. Allen, C. L. Chalk, A. T. Compton, R. T. Cooke, D. Davies, A. E. Donaldson-Sim, S. B. Green, P. B. Grenfell, A. E. J. Lister, R. H. Lloyd, T. M. Pearce, F. W. Sheppard, W. C. B. Smith, G. S. A. S. Wynne.

FOUR YEARS REGULATIONS.—*Materia Medica.*—W. Amsden, P. Cator, R. Cope, F. R. Eddison, T. B. Jones.

APOTHECARIES' HALL.—JULY EXAMINATION.—*Midwifery.*—G. C. Hobbs. AUGUST EXAMINATION.—*Surgery.*—L. L. Allen, J. B. Cautley (Section I). *Medicine.*—E. C. Corfield. *Forensic Medicine.*—E. C. Corfield. *Midwifery.*—E. C. Corfield. The Diploma of the Society was granted to E. C. Corfield.

### Correspondence.

To the Editor of St. Bartholomew's Hospital Journal.

SIR,—I scanned the pages of your last issue in the hope that Dr. Morrison's paper on "The Treatment of the Puerperal Uterus" might have provoked some controversy. I feel impelled to make some remarks thereon, if only to lead to a more adequate discussion

of this important subject. I take it that Dr. Morrison urges intra-uterine douching as a routine not so much because of the present morbidity of the puerperium, but because of the septic troubles, such as pelvic inflammation, which arise after the patient has passed from observation. Now this is an argument based upon hospital practice, and I admit that the number of women who attend the out-patient gynaecological department of a large hospital with pelvic inflammation following confinement form a dismal enough picture. But what do we know of the conditions under which these women were delivered? Probably only a very small percentage will be found to come from that hospital's own midwifery charity; what guarantee have we that any antiseptic measures were used at the time of delivery in the other cases? Now in private practice in a small town our cases do not thus pass away from our observation; should any trouble follow we are sure to hear of it, either directly or through a brother practitioner. During eleven years of practice, in a country town of about 11,000 inhabitants, I have attended 930 confinements, including versions, placenta prævia, and many forceps cases, and have had septic trouble in less than ten, and curiously enough in one of these I had used intra-uterine douches in consequence of reading Dr. Morrison's paper. Does he seriously maintain that if I had employed intra-uterine douches in these 930 cases I should have avoided any septic troubles? Certainly his thirty-six cases with three definite cases of sapræmia do not encourage me to believe that this would have been the result.—I am, sir, yours, &c., G. P.

### New Productions.

FORMALDEHYDE GAS AS A STERILISER AND DEODORANT.—The Formalin Hygienic Company, Limited, of St. Mary-at-Hill, E.C., have forwarded us a specimen of the lamp they are introducing for the diffusion of formaldehyde gas from the polymerised dry formalin.

It has been observed that 1 gramme of formalin diffused in a sick room of 1000 cubic feet will sufficiently deodorise the atmosphere, while 10 grammes diffused in a room of the same cubic space will inhibit the growth of micro-organisms. On the other hand, Dr. Aronson has shown that 70 grammes diffused in 1000 cubic feet will still be harmless to the respiratory organs in man. The lamp is a convenient, ingenious, and inexpensive means of diffusing the gas, and the 1-gramme tabloids prepared by the Formalin Hygienic Company render the whole process exceedingly simple.

### Births.

ARNOLD.—On July 31st, at Oxford Road, Manchester, the wife of F. S. Arnold, M.B., of a son.

BEAUCHAMP.—On August 7th, at Cromwell Road, S.W., the wife of Sydney Beauchamp, M.A., M.B. (Cantab.), of a son.

HEPBURN.—On August 15th, at Marine Parade, South Lowestoft, the wife of Malcolm L. Hepburn, M.D., F.R.C.S., of twin girls (prematurely).

MURDOCH.—On August 17th, at The Oaks, Hythe, Kent, the wife of Alan Murdoch, M.R.C.S., of a son.

### Marriages.

GLOVER.—GLOVER.—On July 22nd, at Union Chapel, Islington, by the Rev. Richard Glover, D.D., of Bristol, and the Rev. W. Hardy Harwood, of Islington, Lewis G. Glover, M.A., M.D. (Cantab.), of 1, College Terrace, Hampstead, youngest son of John Glover, J.P., of Highgate, to Mary Mildred, only daughter of James Grey Glover, M.D., J.P., of Highbury.

ECCLES.—JACKSON.—On August 10th, at the parish church, Chirk, Arthur Symons Eccles, M.B., of Hertford Street, Mayfair, W., to Annie, eldest daughter of John Jackson, of Caeauwynion, Chirk, Denbighshire.

### Death.

PALMER.—On July 28th, at 87, Harcourt Terrace, S.W., Edward Palmer, M.D., in his 81st year.

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